CLAIMS

1. A method for determining the code phase between a code modulated signal (21) received at a receiver and an available replica code sequence, said method comprising:
   - performing a multiplication (25) between samples of a first vector (23) and samples of a second vector (24) resulting in a third vector (26), which first vector (23) is generated based on said received code modulated signal (21) in an operation including a time to frequency transform (22) and which second vector (24) is generated based on said replica code sequence in an operation including a time to frequency transform;
   - dividing said third vector (26) into sections (29) and summing (30) the samples in each section (29);
   - forming a reduced fourth vector (31) out of the summed samples; and
   - performing a frequency to time transform (27) of said fourth vector (31) resulting in a fifth vector (28), each sample of said fifth vector (28) representing a correlation value for a different code phase.

2. A method according to claim 1, wherein said multiplication (25) between samples of said first vector (23) and samples of said second vector (24) is realized as pointwise multiplication.

3. A method according to claim 1, wherein said multiplication between samples of said first vector and samples of said second vector is realized as elementwise multiplication.

4. A method according to claim 1, wherein the number of said sections (29) is selected based on an available information on a range of code phases which are possible in a current situation.

5. A method according to claim 4, wherein the number of said sections (29) is selected to be equal to or larger than the number of code phases in said range.

6. A method according to claim 4, wherein said range of code phases is determined based on available information on a position of said receiver.

7. A method according to claim 1, wherein said sections (29) are of equal size.

8. A method according to claim 1, wherein said code modulated signal is correlated with a plurality of identical replica code sequences which are shifted in phase.

9. A method according to claim 1, further comprising a subsequent coherent and/or noncoherent processing for handling signals of low strength.

10. A method according to claim 1, wherein said first vector (23) is obtained by performing a time to frequency transform (22) of said received code modulated signal (21), and wherein said second vector (24) is given by a vector resulting in a time to frequency transform of the inverted conjugate of said replica code sequence.

11. A method according to claim 1, wherein said first vector is obtained by performing a time to frequency

transform of said received code modulated signal, and wherein said second vector is given by the conjugate of a vector resulting in a time to frequency transform of said replica code sequence.

12. A method according to claim 1, wherein said first vector is given by a vector resulting in a time to frequency transform of the inverted conjugate of said received code modulated signal, and wherein said second vector is obtained by performing a time to frequency transform of said replica code sequence.

13. A method according to claim 1, wherein said first vector is given by the conjugate of a vector resulting in a time to frequency transform of said received code modulated signal, and wherein said second vector is obtained by performing a time to frequency transform of said replica code sequence.

14. A method according to claim 1, wherein said time to frequency transforms are realized as Discrete Fourier Transforms.

15. A method according to claim 1, wherein said time to frequency transforms are realized as Fast Fourier Transforms.

16. A method according to claim 1, wherein said frequency to time transform is realized as Inverse Discrete Fourier Transform.

17. A method according to claim 1, wherein said code modulation of said received code modulated signal is a Code Division Multiple Access (CDMA) spread spectrum modulation.

18. A use of a method according to claim 1 in a process for acquisition and/or tracking of code modulated signals received at a receiver.

19. A receiver comprising
- receiving means for receiving code modulated signals; and
- processing means for carrying out the method according to claim 1.

20. A receiver according to claim 19, which receiver is a receiver of a positioning system.

21. An electronic device comprising a receiver according to claim 19.

22. An electronic device according to claim 21, wherein said electronic device is a mobile terminal capable of communicating with a communication network.

23. A device comprising
- means for receiving from a receiver information on code modulated signals received by said receiver; and
- processing means for carrying out the method according to claim 1.

24. A device according to claim 23, which device is a network element of a network.

25. A system comprising
- a receiver comprising means for receiving code modulated signals, and means for providing information on received code modulated signals; and

- a device according to claim 23.

26. A system comprising
    - a receiver according to claim 19; and
    - a device for providing assistance data to said receiver.

27. A system according to claim 26, wherein said device is a network element of a network.

28. A system according to claim 25, wherein said system is a positioning system.